Peabody, Daniel (EGLE)

From: Peabody, Daniel (EGLE)
Sent: Tuesday, December 29, 2020 9:40 AM
To: saric.james@epa.gov
Cc: Von Wallmenich, Theo/DET; Roberts, Keegan; Bennett, Brian; Kirchner, Scott
Subject: EGLE Comments on OU5 Area 1 CVSC Pilot Study
Attachments: EGLE Comments_Kalamazoo River OU5 Area 1_CVSC Pilot Scale Sampling Plan_11202020.docx; EGLE Comments_Kalamazoo River OU5 Area 1_CVSC Pilot Scale Sampling Plan_11202020.pdf

Jim,

Attached are EGLE's comments on the Area 1 Draft Pilot Study sampling plan. I included a Word copy for easy editing. Please let me know if you have any questions.

Thanks,

Daniel Peabody
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Kalamazoo River Superfund Site
EGLE Comments on the Draft Pilot Study Sampling Plan
Crown Vantage Side Channel Remedial Action
Kalamazoo River Area 1
OU5 Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
November 20, 2020

GENERAL COMMENTS

Commenting Organization: EGLE **Commenter: ---**
General Comment #1: EGLE appreciates the efforts of the Respondents to empirically understand the site-specific nature of both residuals generation and intermixing of backfill materials with the sediment bed. EGLE notes, however, that usefulness of the Crown Vantage pilot study information for other portions of the site will be dependent upon that area's dredged sediment characteristics, hydrodynamic flows and flow controls (if any), dredge technologies, best management practices, backfill materials, backfill material placement, et cetera.

Commenting Organization: EGLE **Commenter: ---**
General Comment #2: Section 1 of the text states, in part: "…nor will the results of the analysis of the pilot study impact the decisions made in the CVSC remedial action." EGLE recommends that if the CVSC confirmation cores and the co-located pilot study cores display statistically significant different contaminant concentrations, efforts be made to understand the cause of those differences. This effort will help to better ensure that future confirmation sampling at other portions of the site is truly representative of post-dredge insitu conditions.

Commenting Organization: EGLE **Commenter: ---**
General Comment #3: EGLE recommends that the document be revised to detail the quantitative and/or qualitative process that will be used to identify the various materials (i.e., backfill materials versus residuals versus undredged sediments). For example, as the residuals are generated from the dredged sediments, how will the residuals be identified separately from the undredged sediment as they likely have very similar characteristics? A multiple lines of evidence process for such material identification is recommended as there may not be a clear visible demarcation between layers.

Commenting Organization: EGLE **Commenter: ---**
General Comment #4: EGLE recommends that the Respondents consider adding an objective to refine/identify the thickness of the residual mixing zone instead of relying solely on the operationally defined 6-inch transition zone.

Commenting Organization: EGLE **Commenter: ---**
General Comment #5: Any revisions made to the text should be carried through to other relevant text portions and figures.

SPECIFIC COMMENTS

Commenting Organization: EGLE **Commenter: ---**
Section: 2.0 **Page #: 2-3** **Lines #: First full paragraph, first sentence**
Specific Comment #1: EGLE recommends that total organic carbon and grain size (if not explicitly captured under other analyses) be included to help determine the materials present in each sampled layer.

Commenting Organization: EGLE **Commenter: ---**
Section: 2.0 **Page #: 2-3** **Lines #: Second full paragraph, second sentence**
Specific Comment #2: The text states that "…composite pilot study results targeting dredge cells with higher apparent generated residuals concentrations." Provide supporting rationale for why certain areas would experience greater residuals generation than others given the nature of the dredging in Crown Vantage (e.g., minimal, if any hydrodynamic flows, consistent dredging technology, et cetera)? Furthermore, explain how targeting areas with "higher apparent generated residuals concentrations" may or may not impact the applicability of the study to other areas with lesser amounts of residuals.

Commenting Organization: EGLE **Commenter: ---**
Section: 2.0 **Page #: 2-3** **Lines #: Second full paragraph, last sentence**
Specific Comment #3: The text states: "Ideally, PCB concentrations between 1 and 10 mg/kg in the 0-6-inch interval would be available for the purposes of this pilot study." Revise the text to note if a 6-inch residual layer is expected to be encountered and, if so, what information supports this hypothesis. EGLE also recommends that the pilot study cores be sectioned at finer intervals (e.g., 3-inch) to potentially obtain a better understanding of residuals generation and/or intermixing.

Commenting Organization: EGLE **Commenter: ---**
Section: 2.0 **Page #: 2-3** **Lines #: Third full paragraph, fourth sentence**
Specific Comment #4: The text states that the first post backfill sample interval will be "…centered on the visible interface between the backfill and underlying sediment." Revise the text to note why this approach is preferable to sample intervals starting/terminating at the interface, rather than overlapping across it (e.g. 3-6" above interface, 0-3" above interface, 0-3" below interface, 3-6" below interface, et cetera).